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high density lipoprotein cholesterol(HDL-C), low density lipoprotein cholesterol(LDL-C), hyper sensitive-C reactive protein (hs-CRP) and tissue inhibitor of metalloproteinase-1 (TIMP-1). The body fat composition and distribution, serum levels of inflammatory factors were also analyzed.

RESULTS Both the control group and disease group, the level of hs-CRP was significantly correlated positively with WC, BMI, WHR, A/G. The level of hs-CRP [(3.41±3.73) mg/L]in the CHD group was significantly higher than the control group[(1.48±1.28) mg/L] (P <0.01). The levels of TIMP-1 have no significant deviation between the CHD group and the control group [(46.32±17.86) ng/ml vs.(51.39±16.50) ng/ml] (*P* =0.21). In both groups, hs-CRP was significantly correlated WC, BMI, WHR, A/G (P<0.05), the levels of TIMP-1 were not significantly correlated with BMI, WC, WHR, TF%, A/G, LDL-C, hs-CRP (all P >0.05).

CONCLUSIONS The accumulation of abdominal adipose tissue is closely correlated to higher hs-CRP. An extent of chronic inflammatory stress might exist in obese person. The level of hs-CRP is significantly increased in the CHD group. However, There is no significantly correlation between serum TIMP-1 and the accumulation of abdominal adipose tissue.

GW26-e0235

Lipid among Patients Presented with Acute Myocardial Infarction Unstable Angina and Stable Angina Pectoris

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OBJECTIVES The objective of this study is to understand the adequacy of lipid-lowering therapy in treating acute myocardial infarction (AMI) patients. Despite the amply evidence and guidelines to treat coronary artery disease (CAD) with lipid-lowering therapy, there have been concerns among physicians in treating patients of AMI who has the lower level of serum lipid.

METHODS We analyzed 3245 CAD lipid profile dates collected from cardiology department in Tianjin Chest Hospital, China, retrospectively. Patient data were divided into three groups based the clinical characteristics. Statistical analyses were performed to provide the baseline lipid levels and clinical feature of AMI.

RESULTS The concentrates of total cholesterol (TC) are (183.1±37.9) mg/dl, (192.1±44.4) mg/dl and (213.8±46.8) mg/dl for groups AMI, unstable angina pectoris (UAP) and stable angina pectoris (SAP) respectively. The concentrates of low-density lipoprotein cholesterol (LDL-C) are (116.6±32.6) mg/dl, (118.8±39.4) mg/dl and (139.1±41.9) mg/dl for groups AMI, UAP and SAP respectively. The concentrates of high-density lipoprotein cholesterol (HDL-C) are (40.7±10.8) mg/dl, (45.4±11.9) mg/dl and (45.8±13.2) mg/dl for groups AMI, UAP and SAP respectively. The concentrates of white blood count (WBC) are $(9.3\pm2.9)\times10^9$/L, $(7.0\pm2.3)\times10^9$/L and $(6.6\pm1.5)\times10^9$/L for groups AMI, UAP and SAP respectively. The concentrates of ejection fraction (EF) are (56.2±9.2)%, (62.0±7.6)%and (62.8±8.0)% for groups AMI, UAP and SAP respectively. The above data suggests that TC, LDL-C and HDL-C serum level in AMI patients were the lowest among three groups, followed by UAP patient group and SAP patient group. There were significant differences in WBC and EF between three groups of patients. A good correlation was confirmed between EF% and the lipid. WBC did not correlate with the lipid except HDL-C. AMI is an acute inflammatory reaction that is accompanied by the change of lipid level.

CONCLUSIONS Although the level of TC, LDL-C and HDL-C are lower in AMI, and higher with WBC, it is maybe related to acute inflammatory reaction during the rupture of atherosclerotic plaques.

GW26-e2193

Renal insufficiency and mortality in coronary artery disease with reduced ejection fraction

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OBJECTIVES Despite the correlation between chronic renal insufficiency and cardiovascular disease has received longstanding attention, the impact of renal insufficiency on the risk of death in coronary artery disease (CAD) patients with reduced ejection fraction (EF) has not been well evaluate.

METHODS 2161 patients with CAD were enrolled and were grouped into 3 eGFR categories: ≥90 (n = 638), 60-90 (n = 1142), and <60 (n = 381) mL/min/1.73 m^2. Patients with EF > 50% or ≤ 50% were defined preserved EF (n = 1749) or reduced EF (n = 412), respectively. The end points were all-cause mortality and cardiac mortality.

RESULTS The average age was 64.59 ± 10.23 years and males accounted for 79.5% of patients. A total of 159 deaths (mortality rate: 7.4%) occurred during the follow-up period (an average of 30.97±11.70 months), including 81 cases (cardiac mortality rate: 3.7%) of cardiac death. Cumulative survival curves showed that in patients with reduced EF, renal insufficiency significantly increases all-cause mortality and cardiovascular mortality in a graded fashion (mortality rate, moderate or severe vs. normal: 29.3% vs. 5.4%, p < 0.001; cardiac mortality rate, moderate or severe vs. normal: 18.2% vs. 4.5%, p = 0.001, respectively). COX regression analysis showed that in CAD patients with reduced EF, moderate to severe renal insufficiency increased all-cause mortality by 6.10-fold (HR 6.10, 95% CI 2.50 to 14.87) and cardiac mortality by 4.10-fold (HR 4.10, 95% CI 1.51 to 11.13). Moreover, even mild renal insufficiency increased all-cause mortality by 2.59-fold (HR 2.59, 95% CI 1.07 to 6.28) and cardiac mortality by 2.22-fold (HR 2.22, 95% CI 0.83 to 5.95).

CONCLUSIONS This study has found that the damage caused by renal insufficiency in patients with CAD is closely related to cardiac function. In patients with reduced EF, renal insufficiency, even mild, would further increase the risks of all-cause mortality and cardiovascular mortality.

GW26-e2247

Analysis of the clinical characteristics and the characteristics of coronary artery diameter of patients with slow coronary flow

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OBJECTIVES This study analyzes the slow coronary flow (SCF) by clinical features and characteristics of coronary artery diameter to explore SCF patient's risk factors and possible pathogenesis.

METHODS The study analyzes 2117 patients retrospectively which underwent coronary artery angiography in Weifang People's Hospital during August 2012 to April 2014. We read their angiographic results, and selected 110 cases (5.20%) as the experimental group (SCF Group) who have a slow flow phenomenon with normal coronary arteries. Three-vessel coronary (LAD, LCX and RCA) TIMI flow frame count in SCF Group is greater than the number of frames in published coronary TIMI flow frames count of two standard deviation. Then we selected 49 cases randomly as the control group (NCF Group) which have normal coronary arteries and coronary artery flow. Recording all subjects clinical data (including relevant medical history and laboratory parameters) and coronary artery lumen diameter data by read the angiographic results. Continuous data indicate (X ± s). Count the number of cases presented with specific information. T-test and Chi-square test were used to compare the two groups; Pearson correlation analysis was used to analyze the correlation between the two variables; Logistic regression analysis was used to find the possible risk factors. SPSS 17.0 was used to analyze data.

RESULTS 1. In SCF Group, the most common type of SCF is simultaneous three-vessel involvement (n =35,31.81%);The most common vascular involvement is LAD (n =73,34.76%).

2. The level of sex, smoking history, history of hypertension, diabetes, history of proportion, age, RBC, RBC, hemoglobin, MCV, PLT, MPV, FIB, Glu, BUN, creatinine, total cholesterol, total triglyceride, LDL, Apo-B and Lp-a is no significant difference (P >0.05); The level of PCV, DD and BUA in SCF Group is significantly higher than NCF Group (P <0.05); The level of HDL and Apo-A1 in SCF Group is significantly lower than NCF Group (P <0.05).

3. Characteristics of coronary luminal: the diameter of left main, proximal LAD, proximal LCX and proximal RCA in SCF Group is significantly larger than NCF Group (P <0.05).

4. The count of frames of each vessel is positive correlation with the proximal diameter of the vessel (correlation coefficient: LAD is 0.361, LCX is 0.386, RCA is 0.289, P <0.05).